# California Regional Water Quality Control Board North Coast Region

#### ORDER NO. R1-2002-0087 ID NO. IB830450SON

### WASTE DISCHARGE REQUIREMENTS

#### FOR

### DONALD CARANO VINTNER'S INN WASTEWATER TREATMENT FACILITY

#### Sonoma County

The California Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board) finds that:

- 1. Mr. Donald Carano (hereinafter Discharger) submitted a Report of Waste Discharge for Vintner's Inn dated April 10, 2001. Supplemental information to complete filing of the application was submitted on February 21, 2002 and June 26, 2002. For the purposes of this Order, Vintner's Inn shall include the collection, treatment and disposal facilities for the Vintner's Inn, John Ash & Co. restaurant, and Le Carrefour Vineyards located at the same site. This Order replaces Order No. 87-20 adopted by the Regional Water Board on February 25, 1987.
- 2. Vintner's Inn is located at 4350 Barnes Road in Sonoma County north of Santa Rosa near the intersection of Highway 101 and River Road (Attachment "A"). The facility is in Hydrologic Unit 114.22 Santa Rosa Hydrologic Subarea, and at Latitude 38°29' and Longitude 122°45'.
- 3. Wastewater treatment and disposal for the inn and restaurant is presently provided by an on-site mound system with a peak design flow of 12,500 gallons per day (GPD) that was approved and installed as part of the original development plan. The existing on-site mound system has experienced failures in the past, which have resulted in surfacing effluent. The existing system has been modified in order to prevent failures and improve treatment. The project, as proposed, will replace the existing wastewater treatment system and will accommodate an expansion of the current 44-room hotel and 100-seat restaurant. The expansion includes the addition of 30 guestrooms and 6 guest cottages, a conference facility with a private banquet room and kitchen, a guest spa, and a minor expansion of the existing John Ash & Co. restaurant.

- 4. The Discharger proposes to expand the restaurant and inn and construct an on-site wastewater treatment plant with a winter wastewater storage pond and perform seasonal irrigation of the vineyard with the treated wastewater.
- 5. <u>Treatment capacity</u> The peak design flow is estimated to be 32,000 GPD. The treatment facilities will include pressure sewer collection lines and a package secondary on-site wastewater treatment plant using a fixed activated sludge treatment (FAST) system that is capable of providing nitrogen removal to a level equal to the drinking water standard and disinfection of the treated effluent.
- 6. <u>Disposal capacity</u> All effluent from Vintner's Inn will be discharged to land. The effluent will be held in a wastewater holding pond with a capacity of 7.1 million gallons with a maximum operating water depth of 11 feet to hold the treated wastewater through the wet weather season. During the dry weather season, the treated wastewater will be withdrawn from the holding pond and used for irrigation of the vineyards. The vineyards will be irrigated using a subsurface drip system. The subsurface drip irrigation disposal system is designed in such a fashion that there will be, at minimum, two feet of unsaturated soil beneath any trench bottom in use. The soil at the project site will support a subsurface drip irrigation disposal rate of 0.5 gpd/ft², however, the site will be irrigated to meet the vineyard water requirements. The maximum water requirement for the vines during the summer is approximately 0.16 gpd/ft².
- 7. The sewage will be collected in grinder pump units and pumped to the wastewater treatment facilities via a pressure sewer collection system. The wastewater will be discharged into a 25,000-gallon tank for primary treatment. Following the primary tank, a 15,000-gallon equalization tank will buffer peak flows and a pump system will feed the primary-treated effluent to the 20,000-gallon anoxic tank. Three FAST modules in 9,000-gallon concrete tanks will follow the anoxic tank, providing secondary treatment. The FAST modules provide a plastic media for biological organisms to affix. A recycle line from the third FAST tank will go to the anoxic tank to provide denitrification of the wastewater. The treated wastewater will be disinfected in a chlorine contact chamber using sodium hypochlorite (liquid bleach) injection prior to discharge to the wastewater holding pond. An emergency power system will be provided to keep the wastewater treatment systems operational during power outages.
- 8. The disinfected secondary-treated effluent will be directed into a holding pond located adjacent to the treatment system in the southeasterly section of the project site (Attachment B). The pond will be lined with compacted clay soil, a minimum of 2 feet thick, and will have a maximum hydraulic conductivity of 1 x 10<sup>-6</sup> cm/sec (1.0 foot/year). The pond will be used to store all treated wastewater during the wet weather season; during the dry season the effluent will be pumped from the holding pond into the subsurface irrigation system.

- 9. The depth to groundwater has been measured at depths of 2 to 2.5 feet during the wet weather season and 10 to 12 feet in the summer. The preliminary results of the water level monitoring confirm a general groundwater flow direction from the east to the west-southwest.
- 10. The Water Quality Control Plan for the North Coast Region (Basin Plan) includes water quality objectives and receiving water limitations. The Basin Plan includes beneficial uses, water quality objectives, implementation plans for point source and nonpoint source discharges, prohibitions, and statewide plans and policies. As specified in the Basin Plan, the beneficial uses of the Russian River and its tributaries include:
  - a. municipal and domestic supply
  - b. agricultural supply
  - c. industrial process supply
  - d. industrial service supply
  - e. groundwater recharge
  - f. water contact recreation
  - g. non-contact water recreation
  - h. freshwater replenishment
  - i. cold freshwater habitat
  - j. warm freshwater habitat
  - k. wildlife habitat
  - 1. migration of aquatic organisms
  - m. spawning, reproduction, and/or early development of fish
  - n. preservation of rare, threatened or endangered species
- 11. Beneficial uses of areal groundwaters include:
  - a. domestic water supply
  - b. agricultural water supply
  - c. industrial process water supply
  - d. industrial service water supply
- 12. On December 18, 2001, the Sonoma County Board of Supervisors adopted a Mitigated Negative Declaration for the Vintner's Inn expansion prepared by the Sonoma County Permit and Resource Management Department (PRMD). The Mitigated Negative Declaration evaluated the environmental impacts of the ultimate treatment and disposal capacity of the wastewater generated by Vintner's Inn. As a Responsible Agency under CEQA, the Regional Water Board considered the Mitigated Negative Declaration and determined that impacts of the aspects of the project the Regional Water Board is being asked to approve are reduced to less-than-significant levels.

- 13. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations.
- 14. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.
- 15. The permitted discharge is consistent with the provisions of State Water Resources Control Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*. The discharge, as permitted, will not affect water quality.

THEREFORE, IT IS HEREBY ORDERED that Board Order No. 87-20 is hereby rescinded and the Vintner's Inn Wastewater Treatment Facility, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, shall comply with the following conditions:

#### A. DISCHARGE PROHIBITIONS

- 1. There shall be no discharge of any waste from the Vintner's Inn Wastewater Treatment Facility to surface waters or groundwaters.
- 2. The discharge of untreated or partially treated waste from anywhere within the collection, treatment, or disposal facility is prohibited.
- 3. Creation of pollution, contamination, or nuisance, as defined by CWC Section 13050, is prohibited.
- 4. The discharge of waste to land that is not under the control of the Discharger is prohibited, except as authorized under section **C. SOLIDS DISPOSAL**.
- 5. The discharge of waste to the wastewater storage pond is prohibited until the pond liner is constructed and certified, by the Discharger's engineer and approved by the Executive Officer, as complying with the following requirements:
  - a. the liner is constructed of clay soil with a minimum relative compaction of 90 percent;
  - b. the liner is a minimum of 2 feet thick; and
  - c. the liner has maximum hydraulic conductivity of  $1 \times 10^{-6}$  cm/sec.

#### **B. EFFLUENT LIMITATIONS**

1. Representative samples of the effluent taken prior to discharge to the holding pond shall not contain constituents in excess of the following limits:

Constituent	<u>Unit</u>	Monthly Average <sup>1</sup>	Daily <u>Maximum</u> <sup>2</sup>
BOD (20°C, 5-day)	mg/L	30	60
TSS	mg/L	30	60
Settleable Solids	mL/L	0.1	0.1
Total Coliform	MPN/100 ml	23	230
Total Nitrogen	mg/L	10	30
Hydrogen Ion	рH	Not less than 6.5 nor greater than 8.5	

- 2. The peak flow of waste shall not exceed 32,000 GPD averaged over a calendar month.
- 3. The discharge of all wastewater shall be kept underground at all times.
- 4. At no time shall there be disposal to the subsurface drip lines in areas where the depth of unsaturated soil below the trench bottom is less than two feet.
- 5. At no time shall there be disposal to the subsurface drip lines between December 16<sup>th</sup> and April 30<sup>th</sup>.

#### C. SOLIDS DISPOSAL

- 1. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of at a legal point of disposal, and in accordance with the State Water Board promulgated provisions of Title 27, Division 2, of the California Code of Regulations (CCR).
- 2. The Discharger is encouraged to comply with the state guidance manual issued by the State Department of Health Services (DHS) titled "Manual of Good Practice for Landspreading of Sewage Sludge".
- 3. Use and disposal of sewage sludge shall comply with existing federal and state laws and regulations, including permitting requirements and technical standards contained in 40 CFR 503.

<sup>&</sup>lt;sup>1</sup> The arithmetic mean of all samples collected in a calendar month.

<sup>&</sup>lt;sup>2</sup> The maximum sample of all samples collected in a calendar day.

4. By March 1st of each year, the Discharger shall submit a sludge disposal plan describing the volume of sludge generated by the facility during the preceding calendar year and a description of all sludge disposal activities. The plan shall contain proposals for disposal projects to be implemented in the upcoming year. Regional Water Board staff reserve the right to request individual reports of waste discharge for sludge disposal operations that pose a threat to water quality.

#### D. GENERAL PROVISIONS

# 1. Availability

A copy of this Order shall be maintained at the discharge facility and be available at all times to operating personnel.

#### 2. Severability

Provisions of these Waste Discharge Requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.

#### 3. Operation and Maintenance

The Discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the Discharger to achieve compliance with the Waste Discharge Requirements.

#### 4. Operation Manual

A copy of the facility operations and maintenance manual, including a maintenance timeline, shall be prepared and submitted to the Regional Water Board no later than 60 days prior to initiation of wastewater treatment operations and thereafter kept at the facility and available to operation personnel and Regional Water Board staff at all times. Additionally, the facility will be operated and maintained in accordance with the prepared manual.

### 5. Auxiliary Electrical Power

The facility shall be equipped with an auxiliary power system to operate all necessary treatment functions during a loss of electrical power.

#### 6. Change in Discharge

Any change in the character, location, or volume of the discharge or other material changes to the facility, as described in the Report of Waste Discharge, is prohibited.

### 7. Vested Rights

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, state, or local laws, nor create a vested right for the Discharger to continue the waste discharge.

### 8. Monitoring

The Discharger shall comply with the Contingency Planning and Notification Requirements Order No. 74-151 and the Monitoring and Reporting Program No. R1-2002-0087 and any modifications to these documents as specified by the Executive Officer. Such documents are attached to this Order and incorporated herein. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the DHS. If all other analyses are conducted at a certified off-site laboratory, analyses for pH, chlorine residual, dissolved oxygen, and settleable matter performed by a noncertified on-site laboratory will be accepted provided a quality assurance/quality control program is instituted by the laboratory, and a manual containing the steps followed in this program is kept in the laboratory and made available for inspection by staff of the Regional Water Board. The quality assurance/quality control program shall conform to DHS guidelines.

#### 9. Signatory Requirements

- a. All Report of Waste Discharge applications submitted to the Regional Water Board shall be signed by either a principal executive officer, ranking elected official, or a responsible corporate officer. For purposes of this provision, a responsible corporate officer means:
  - i. a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or
  - ii. the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- b. Reports required by this Order and other information requested by the Regional Water Board may be signed by a duly authorized representative provided:
  - i. the authorization is made in writing by a person described in paragraph (a) of this provision;

- ii. the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; and
- iii. the written authorization is submitted to the Regional Water Board prior to or together with any reports, information, or applications signed by the authorized representative.
- c. Any person signing a document under paragraph (a) or (b) of this provision shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

# 10. Inspections

The Discharger shall permit authorized staff of the Regional Water Board:

- a. to enter premises in which an effluent source is located or in which any required records are kept;
- b. access to copy any records required to be kept under terms and conditions of this Order;
- c. to inspect monitoring equipment or records; and
- d. to sample any discharge.

#### 11. Noncompliance

In the event the Discharger is unable to comply with any of the conditions of this Order due to:

- a. breakdown of waste treatment equipment;
- b. accidents caused by human error or negligence; or
- c. other causes such as acts of nature;

the Discharger shall notify the Executive Officer by telephone as soon as it or its agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.

## 12. Revision of Requirements

The Regional Water Board will review this Order periodically and may revise requirements when necessary.

#### Certification

I, Susan A. Warner, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on September 26, 2002.

Susan A. Warner Executive Officer

(vintner'sinnwdrpermit)